=> d his

(FILE 'CAPLUS' ENTERED AT 15:09:13 ON 26 FEB 2005) DEL HIS

FILE 'REGISTRY' ENTERED AT 15:13:29 ON 26 FEB 2005

L1 STRUCTURE UPLOADED

L2 1 S L1

L3 12 S L1 FULL

FILE 'CAPLUS' ENTERED AT 15:14:11 ON 26 FEB 2005

L4 3 S L3

=> d que 14 stat

L1 STR

Structure attributes must be viewed using STN Express query preparation.

L3 12 SEA FILE=REGISTRY SSS FUL L1

L4 3 SEA FILE=CAPLUS ABB=ON PLU=ON L3

=> d 1-3 bib abs hitstr

10/813,122

Page 2

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:75790 CAPLUS

DN 142:144381

TI Colored curable compositions, color filters with good light, heat, and solvent resistance, and manufacture thereof

IN Araki, Katsumi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 41 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2005024916	A2	20050127	JP 2003-190452	20030702
PRAI	JP 2003-190452		20030702		

AB The compns., showing wide development latitude, high resolution, and high transmittance, contain binders and colorants containing compds. of aggregation energy d. of ≥25.0 MPa1/2. Color filters with the title advantages are manufactured by application of the above compns. on supports followed by exposure via masks and development.

IT 778635-23-7 778635-25-9 778635-27-1

778635-29-3

RL: TEM (Technical or engineered material use); USES (Uses) (dyes; curable compns. containing dyes with high aggregation energy d. for color filters with good light, heat, and chemical resistance)

RN 778635-23-7 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]](cyclohexylmeth
 yl)amino]sulfonyl]phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI)
 (CA INDEX NAME)

Na

RN 778635-25-9 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]ethylamino]sulf onyl]phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

RN 778635-27-1 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]amino]sulfonyl] phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 778635-29-3 CAPLUS

CN 2-Naphthalenesulfonic acid, 6-amino-5-[[2-[[[4-[[(butylamino)carbonyl]amino]phenyl]amino]sulfonyl]phenyl]azo]-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

● Na

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN applicant

2004:904151 CAPLUS AN

DN 141:372906

ΤI Coloring material-containing curable compositions with good developability and heat and light resistance for color filters and their production method

IN Araki, Katsumi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 48 pp.

CODEN: JKXXAF

DT Patent

LΑ Japanese

FAN.	CNT 1 PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2004300371	A2	20041028	JP 2003-97800	20030401
	US 2004260075	A1	20041223	US 2004-813622	20040331
PRAI	JP 2003-97799	Α	20030401		
	JP 2003-97800	Α	20030401		
OS	MARPAT 141:372906				
GI					

AB Title compns. comprise binders and azo compound colorants I, wherein R1 = C1-21 alkyl, aryl, aralkyl, alkylamino, aralkylamino, or arylamino, C1-10 perfluoroalkyl, C2-21 alkenyl, methacryloylamino, or ethoxycarbonylamino; R2 = single bond, CH2, CH2CH2, CH2CH2CH2, or CH2CH2CH2CH2; R3 = H, C1-21 alkyl or alkoxy, halogen atom, or OH; R4 = H, C1-21 alkyl, aryl, or aralkyl, or C2-21 alkenyl; R5 = H, cationic metal atom, nitrogen-containing cationic compound; m = 0-2 integer; and n = 0-4 integer. Thus, 9.4 parts a resist solution comprising propylene glycol monomethyl ether acetate 19.20, Et lactide 36.67, 41% allyl methacrylate-methacrylic acid copolymer solution 30.51, dipentaerythritol hexaacrylate 12.20, p-methoxyphenol 0.0061, F 475 fluorosurfactant 0.83, and 2-(o-benzoyloxim)-1-[4-(phenylthio)phenyl]-1,2octanedione 0.586 parts and 0.6 parts azo compound were mixed, applied on a primer-coated glass substrate, prebaked at 120° for 120 s, irradiated through a mask, developed, and washed to give a test piece with good developability and heat and light resistance.

IT778635-23-7 778635-25-9 778635-27-1

778635-29-3 778635-31-7

RL: MOA (Modifier or additive use); USES (Uses)

(colorant; coloring material-containing curable compns. with good developability and heat and light resistance for color filters)

RN 778635-23-7 CAPLUS

2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl](cyclohexylmeth CN yl)amino]sulfonyl]phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

RN 778635-25-9 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]ethylamino]sulf onyl]phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 778635-27-1 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]amino]sulfonyl] phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

RN 778635-29-3 CAPLUS

CN 2-Naphthalenesulfonic acid, 6-amino-5-[[2-[[[4-[[(butylamino)carbonyl]amino]phenyl]amino]sulfonyl]phenyl]azo]-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 778635-31-7 CAPLUS

CN 2-Naphthalenesulfonic acid, 5-[[2-[[[4-(acetylamino)phenyl]hexylamino]sulf onyl]phenyl]azo]-6-amino-4-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

```
1970:404952 CAPLUS
ΑN
DN
     73:4952
ΤI
     Polymerizable dyes
IN
     Booth, Gerald; Tinker, Barrie; Parsons, Brian N.
PΑ
     Imperial Chemical Industries Ltd.
SO
     Ger. Offen., 75 pp.
     CODEN: GWXXBX
DT
     Patent
     German
LΑ
FAN.CNT 1
     PATENT NO. KIND
                                  DATE APPLICATION NO.
                                                                   DATE
     DE 1919588 A 19691030 DE 1969-1919588
GB 1252453 A 19711103 GB 1968-18101
BE 731683 A 19691017 BE 1969-731683
NL 6905927 A 19691021 NL 1969-5927
FR 2006386 A5 19691226 FR 1969-12044
GB 1968-18101 A 19680417
GB 1968-18110 A 19680417
ΡÍ
                                                                         19690417
                                                                       19680417
                                                                     19690417
                                                                         19690417
                                                                         19690417
PRAI GB 1968-18101
     Dyes containing CH2:CRCONH groups (R = H, Me), useful for dyeing cellulose and
AΒ
     natural and synthetic polyamide fibers fast shades, were prepared Thus, a
     solution of 4.6 parts 2.4-(CH2:CHCONH)2C6H3NH2 (I) in a mixture of 250 parts
     H2O and 60 parts Me2CO was added with stirring at 10° to a
     suspension of CuPc(SO2Cl)3 (Pc = phthalocyanine) (prepared from 5.8 parts
     CuPc in 150 parts H2O while adding aqueous Na2CO3 to maintain Ph 7), stirred
     for 2 hr, treated with 4.2 parts NaHCO3, stirred for 10 hr, treated with 2
     parts pyridine, stirred for 24 hr, adjusted to pH 2 with HCl, and salted
     to give a turquoise blue dye for wool and cotton. Similarly, other dyes
     were prepared (reactants and shade given): 1-amino-4-(3-
     sulfoanilino)anthraquinone-2-sulfonyl chloride, I, blue on wool;
     1-amino-4-[3-[3,4-bis(acryloylamino)anilinosulfonyl]anilino]anthraquinone-
     2-sulfonic acid, Me2SO4, blue on wool; 3-H2NC6H4NHCONHC6H3(NHCOCMe:CH2)2
     (m. 193-5^\circ) \rightarrow 1-(4-sulfophenyl)-3-methyl-5-pyrazolone,
     yellow on wool; 1-amino-4-bromoanthraquinone-2-sulfonic acid (II),
     3,4-(CH2:CMeCONH)2C6H3NH2 (III) (m. 154°), blue on wool;
     1-(\beta-\text{sulfatoethylamino})-4-\text{bromoanthraquinone}, III, blue on wool and
     nylon; II, 3,4-(CH2:CMeCONH)2C6H3NHCH2C6H4NH2-3 m. 136°), blue on
     wool and nylon; 3,4-(CH2:CMeCONHC6H3NHSO2C6H4NH2-2 (m. 160-1°)
     → 2,8,6-H2N(HO)C10H5SO3H, bluish red on wool and nylon;
     3,4-(CH2:CMeCONH)2C6H3NHSO2C6H4NH2-3 (m. 214-16^{\circ} \rightarrow 1-(2,5-1)
     dichloro-4-sulfophenyl)-3-methyl-5-pyrazolone, greenish yellow on wool and
     nylon; 2,5,4-Cl2(H2N)C6-H2SO2NHC6H3(NHCOCH:CH2)2-2,4 [m. 266°
     (decomposition) \rightarrow 3-MeC6H4N(CH2CH2OH)2, red on polyamide;
     1-(4,6-dichloro-s-triazin-2-ylamino)-7-(2-sulfophenylazo)-8-naphthol-3,6-
     disulfonic acid, I, reddish blue on cellulose; 2-chloro-4-(3-amino-4-
     sulfoanilino) -6-[3,4-bis(acryloylamino)anilino]-s-triazine →
     1,8,3,6-AcNH(HO)C10H4(SO3H)2, bluish red on cellulose, I, Cu complex of
     1-(4,6-dichloro-s-triazin-2-ylamino)-7-(5-chloro-6-hydroxy-3-
     sulfophenylazo) -2-hydroxy-3,6-naphthalenedisulfonic acid, purple on
     cellulose; I, cyanuric chloride, 1-amino-4-(3-sulfo-4-
     aminoanilino)anthraquinone-2-sulfonic acid, blue on cellulose; II,
     3,4-(CH2:CMeCONH)2C6H3NHSO2C6H4NH2-3, reddish blue on wool and nylon. The
     following intermediates were also prepared: 3,4-(CH2:CHCoNH)2C6H3X (IV, X =
     NO2), m. 203°; IV (X = NHAc), 199-201°; IV (X = NH2), m. 234°; 3,4-(CH2:CMeCONH) 2C6H3X (V, X = NO2), m. 164° V (X =
     NHCONHC6H4NO2-3), m. 238-9°; 3,4-CH2:CHCONH(CH2:CHCONMe)C6H3X (VI,
     X = NH2, m. 158-60°; VI (X = NO2), m. 206°;
     3,4-CH2:CMeCONH(CH2:CHCONH)C6H3X (VII, X = NH2), m. 185-7°; VII (X
     = NO2), m. 182-4°; 6-amino-1,4-diacryloyl-1,2,3,4-
```

tetrahydroquinoxaline, m 176°; 6-nitro-1.4-diacryloyl-1,2,3,4-

tetrahydroquinoxaline. m. 122° (MeOH); 3,4-

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

L4

Na

=> => d que 16 stat

L5 57 SEA FILE=CAPLUS ABB=ON PLU=ON "ARAKI KATSUMI"/AU L6 1 SEA FILE=CAPLUS ABB=ON PLU=ON L5 AND AZO

=> d bib abs

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:904151 CAPLUS

DN 141:372906

TI Coloring material-containing curable compositions with good developability and heat and light resistance for color filters and their production method

IN Araki, Katsumi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 48 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

PAN.C	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2004300371	A2	20041028	JP 2003-97800	20030401
	US 2004260075	A1	20041223	US 2004-813622	20040331
PRAI	JP 2003-97799	Α	20030401		
	JP 2003-97800	Α	20030401		
OS	MARPAT 141:372906				
GI					

Title compns. comprise binders and azo compound colorants I, AB wherein R1 = C1-21 alkyl, aryl, aralkyl, alkylamino, aralkylamino, or arylamino, C1-10 perfluoroalkyl, C2-21 alkenyl, methacryloylamino, or ethoxycarbonylamino; R2 = single bond, CH2, CH2CH2, CH2CH2CH2, or CH2CH2CH2CH2; R3 = H, C1-21 alkyl or alkoxy, halogen atom, or OH; R4 = H, C1-21 alkyl, aryl, or aralkyl, or C2-21 alkenyl; R5 = H, cationic metal atom, nitrogen-containing cationic compound; m = 0-2 integer; and n = 0-4integer. Thus, 9.4 parts a resist solution comprising propylene glycol monomethyl ether acetate 19.20, Et lactide 36.67, 41% allyl methacrylate-methacrylic acid copolymer solution 30.51, dipentaerythritol hexaacrylate 12.20, p-methoxyphenol 0.0061, F 475 fluorosurfactant 0.83, and 2-(o-benzoyloxim)-1-[4-(phenylthio)phenyl]-1,2-octanedione 0.586 parts and 0.6 parts azo compound were mixed, applied on a primer-coated glass substrate, prebaked at 120° for 120 s, irradiated through a mask, developed, and washed to give a test piece with good developability and heat and light resistance.